

Application Serial No: 11/040,297  
In reply to Office Action of 24 June 2005

Attorney Docket No. 83303

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims

1. (currently amended) An electrostrictive terpolymer ~~comprising~~ consisting of:

vinylidene fluoride;

trifluoroethylene; and

at least one monomer, wherein said at least one monomer is an ethylene-based monomer selected from the group consisting of 1-chloro-2-flouroethylene and 1-chloro-1-flouroethylene and said at least one monomer has at least one halogen atom side group [[,]] wherein said halogen atom side group is chlorine and wherein said at least one monomer favors gauche-type linkage along a backbone of a polymer chain of said terpolymer.

2. (original) The electrostrictive terpolymer according to

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claim 1 wherein said halogen atom side group is of a size sufficient to move said polymer chain away from an adjacent polymer chain without inhibiting the formation of polymer crystallites.

3. (cancelled)

4. (cancelled)

5. (currently amended) The electrostrictive terpolymer according to claim [[4]]1 wherein said terpolymer comprises from about 65 mole % to about 71 mole % vinylidene fluoride, from about 26 mole % to about 33 mole % trifluoroethylene and from about 1 mole % to about 6 mole % chlorofluoroethylene.

6. (original) The electrostrictive terpolymer according to claim 1 wherein said terpolymer comprises from about 65 mole % to about 71 mole % vinylidene fluoride, from about 26 mole % to about 33 mole % trifluoroethylene and from about 1 mole % to about 6 mole % said at least one monomer.

7. (currently amended) An electrostrictive terpolymer ~~comprising~~ consisting of:

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from about 65 mole % to about 71 mole % vinylidene  
fluoride;

from about 26 mole % to about 33 mole %  
trifluoroethylene; and

from about 1 mole % to about 6 mole % of a chloro-monomer  
which favors *gauche*-type linkage, wherein said chloro-  
monomer is selected from the group consisting of 1-  
chloro-2-fluoroethylene and 1-chloro-1-fluoroethylene.

8. (currently amended) A method of synthesizing an  
electrostrictive

terpolymer film comprising steps of:

combining vinylidene fluoride, trifluoroethylene, and at  
least one monomer to form a terpolymer, wherein said  
at least one monomer is an ethylene-based monomer  
selected from the group consisting of 1-chloro-2-  
flouroethlylene and 1-chloro-1-flouoroethlylene and  
said at least one monomer has at least one halogen  
atom side group [[,]] wherein said halogen atom side  
group is chlorine and wherein said at least one  
monomer favors *gauche*-type linkage along a backbone of  
a polymer chain of said terpolymer;

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forming said terpolymer into a thin film by a process  
selected from the group consisting of solvent casting  
and extrusion; and

annealing said terpolymer.

9. (original) The method of synthesizing an electrostrictive terpolymer film according to claim 8 wherein said halogen atom side group is of a size sufficient to move said polymer chain away from an adjacent polymer chain without inhibiting the formation of polymer crystallites.

10. (cancelled)

11. (cancelled)

12. (original) The method of synthesizing an electrostrictive terpolymer film according to claim 8 wherein said terpolymer comprises from about 65 mole % to about 71 mole % vinylidene fluoride, from about 26 mole % to about 33 mole % trifluoroethylene and from about 1 mole % to about 6 mole % said at least one monomer.

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13. (currently amended) A method of synthesizing an electrostrictive terpolymer film ~~comprising~~ consisting of the steps of:

combining from about 65 mole % to about 71 mole % vinylidene fluoride, from about 26 mole % to about 33 mole % trifluoroethylene and from about 1 mole % to about 6 mole % chlorofluoroethylene to form a terpolymer;

forming said terpolymer into a thin film by a process selected from the group consisting of solvent casting and extrusion; and

annealing said terpolymer.